Remarks

The Applicants present the following status of the claims:

- 1-11 were previously allowed
- 12-18 were objected to for lack of antecedent basis in certain claims. Claim 12 has been amended to make the term "proxy" in the beginning part of the claim line up with the term "proxy line" in the later part of the claim. The change is not intended to change the scope of the claim. Likewise, claim 18 referred to a "modem model" in claim 12. That term actually appears in claim 13, so claim 18 was adjusted to refer to the appropriate claim, but no change in scope was intended. Thus, claims 12-18 should now be allowable.
- Claim 19 was rejected under 103. Applicants respectfully disagree for reasons elaborated below.
- Claim 24 was rejected under 102.
- Claim 26 was rejected under 102.
- Claim 29-33. Claim 29 was rejected under 102. The remaining claims were objected to. Applicants have canceled claim 29 and rewritten claim 31 in independent form. Claims 30 and 32-33 now depend on claim 31. Because claim 31 was previously indicated as allowable as written in independent form, claims 28-33 should now be allowable.
- Claim 34-52 were previously allowed.
- Claim 53-57 were rejected under 102.

102 Rejection -- Taarud

Claims 24 and 26 were rejected based on Taarud. Each of those claims relates to a method of marketing telephone lines to customers. The claims relate to lines that might be used for high speed digital service or low speed digital service. The lines are speed qualified using one-ended electrical measurements. In claim 24, the method includes contacting the customers that have the high speed lines and offering them high speed service. In claim 26 the method includes using high speed lines for those customers who have requested high speed service. Both of these claims solve an important business problem for telephone companies that is neither shown or suggested in the references.

In particular, the phone company is faced with a problem that not all of its telephone lines will support high speed digital services. The phone company has an economic incentive to match up the lines that support high speed services to those customers that want them. And, the phone company wants to do this cheaply – and the

claim addresses this by specifically mentioning using one-ended electrical measurements to qualify the lines.

As understood, Taarud relates to system that allows a line to be used for analog or digital communications – depending on what type of equipment is attached to the line. It does not relate to qualifying lines based on the speed of the digital service the line can support and it does not address a marketing method that allows the phone company to match up the high speed lines with customers who want them.

Accordingly, the claimed invention is neither anticipated nor obvious.

102 Rejection –Borchert

Claims 53-57 are rejected based on Borchert. Applicants respectfully disagree.

The claims recite a specific method of finding a bridged tap on a telephone line. As indicated in the application, a bridged tap can impact the ability of the line to support high speed data services.

In contrast, Borchert relates to a time domain reflectometry (TDR) approach to finding bridged taps. As understood, such an approach sends an electrical pulse down the telephone line and measures the reflection of that pulse coming back. The result is a display of the reflected pulse. Applicants do not believe, even if the claim is interpreted broadly, that the reference could be fairly characterized as describing a system that determines admittance and detects a bridge tap based on finding a particular signature in the admittance.

Claim 53 has been amended to state that the signature relates to a frequency measurement – which further emphasizes the difference from the time domain reflectometry techniques of the reference. Claim 53 was also amended to more broadly state that the invention relates to detecting a bridged tap.

103 Rejection -- Taarud in view of Burgess

Claim 19 has been rejected based on Taarud in view of Burgess. Claim 19 relates to a method of marketing telephone lines to customers based on speed qualifications made on those lines using electrical measurements made from a central location. Applicants contend that there is no motivation to combine the references and that, even if combined, the references do not teach the claimed invention.

Taarud relates to a system designed to work regardless of whether the line supports analog to digital transmission. It differs from the claim in multiple respects:

1. The reference does not describe a distinction based on speed qualification. It determines whether equipment is installed in the network that supports digital transmission as opposed to analog transmission. (See col. 4, lines 28-42).
2. The reference does not describe marketing of telephone lines to customers based on the speed qualification. To the contrary, the reference teaches a way that a customer can use the line regardless of what kind of transmission it supports.
3. The technique does not use electrical measurements. As understood, the reference describes a system that sends a digital signal. If an appropriate response is received, then it is assumed that the line supports digital transmission. One advantage of the invention is that the performance of the line can be predicted from electrical measurements without actually trying the communication.
4. The "measurements" are not made from a central location. The reference describes a technique in which a communication is sent from one point to another. There must be a device at the other end of the line to respond appropriately for the technique to work. Relying on a device that can respond to a communication at the end of every line is more expensive, and therefore less desirable, than the claimed invention.

Burgess relates to a system with an opposite motivation of Taarud. In cases where a line can support two types of communication, Taarud seeks to allow the customer to use either. The motivation in Burgess is to selectively block a customer from using one type of service, even if the line would support it. Because the references seek to achieve contradictory objectives, they can not be combined.

Additionally, Burgess provides an opposite function from the claimed invention and therefore does not render it obvious. In the invention, the speed of transmission that the line can support is first determined. Then, a billing rate is set based on the speed for which the line is qualified. Even if one interpreted Burgess as relating to differential pricing based on speed, it achieves this in the opposite way. The system in Burgess assumes that the line can support either type of transmission. It is told the price and changes the performance to match the price. There is no teaching or suggestion to do the opposite – to figure out the speed and set the price accordingly.

Thus, there is no teaching or suggestion in the references to create a method of marketing telephone lines as recited in the claim. The claim is therefore not obvious.

Claims 20 and 22 were objected to previously and should be allowable.

103 Rejection -- Taarud in view of Burgess and Hillson

Claim 21 was rejected under Taarud and Burgess as mentioned above, further in view of Hillson. Claim 21 depends from claim19 and adds additional limitations relating to repeated monitoring of the service level of the line. Claim 21 is non-obvious for the same reasons given above in claim 19.

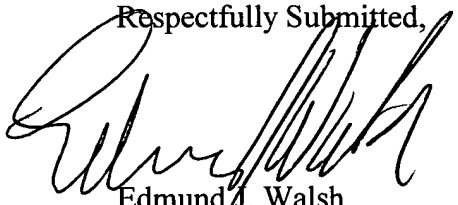
Applicants respectfully disagree that Hillson teaches or motivates the additional limitations of claim 21. As understood, Hillson relates to a multimedia communication terminal that a customer pays a fee to access. The terminal might allow voice communication or might allow a customer to have digital communications over a network, like the Internet. When digital services are being used, the charge is based on the amount of the data that is downloaded. So, if the Internet is congested and giving slow response times, the customer is not charged a high fee. It seems that to the extent the amount of information downloaded is measured, the measurement indicates how fast the data is being sent by a device on the other end of a line.

However, the fee is not set based on the speed at which the line is qualified to provide data. Nor is there any teaching of repeatedly performing one-ended electrical measurements on those lines for which a billing rate has been set based on performance. Therefore, the claimed invention can not be considered to be obvious.

Conclusion:

Applicants respectfully submit that the application is now in condition for allowance. Favorable action is therefore requested.

Respectfully Submitted,



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